

**REMARKS**

This application has been carefully reviewed in light of the Office Action mailed July 5, 2005. Claims 1-36 are pending in the Application. Claims 1-6, 13-18 and 24-36 are rejected. Applicants respectfully request reconsideration and favorable action of all pending claims in view of the following remarks.

**Rejections Under 35 U.S.C. §§ 102 and 103**

The Office Action rejects Claims 1-6, 13, and 24-36 under 35 U.S.C. § 102(b) as being anticipated over U.S. Patent No. 4,976,308 to *Faghri* ("Faghri") and rejects Claims 14-18 under 35 U.S.C. § 103(a) as being unpatentable over *Faghri*. Applicants respectfully traverse these rejections for the reasons discussed below.

Claim 1 recites a housing having a chamber with a heat absorbing material therein. Claim 1 further recites that the housing has "an exterior surface through which heat can enter and leave said housing" and recites "a heat pipe disposed at least substantially within the chamber and disposed within the material of said housing and operative to facilitate heat distribution within the material of said housing in a manner which reduces temperature gradients across said surface." In contrast, the arrangement disclosed in the *Faghri* patent is significantly different.

More specifically, as described in Applicants' Response dated September 29, 2004, *Faghri* discloses in Figures 2 and 3 a cylindrical housing 12 having in the interior thereof a chamber which contains a heat absorbing material 18 encased within a plurality of spherical containers 16. A plurality of heat pipes 22 extend radially, and each have one end disposed within the housing 12 and the other end disposed externally of the housing 12. The heat pipes transfer heat between a fluid 6 which surrounds the housing 12, and the phase change material 18 within the containers 16 inside the housing. The housing 12 is made of stainless steel, and it appears to be possible for some heat to enter and leave the housing 12 through the exterior surface of the housing 12. However, *Faghri* appears to teach that the majority of the heat which enters and leaves the housing 12 travels through the heat pipes 22. In this regard, it should be noted that the heat pipes 22 of *Faghri* function primarily to transfer heat between two regions respectively located inside and outside the housing 12, rather than to transfer heat within the material of the housing 12. FIGURE 5 also clearly illustrates that the majority portion of heat pipe 22 is disclosed within cylindrical housing 12. The heat pipes 22

of *Faghri* are clearly not "disposed at least substantially within the chamber and disposed within the material of said housing and operative to facilitate heat distribution within the material of said housing in a manner which reduces temperature gradients across said surface", as required by Claim 1. It is therefore respectfully submitted that Claim 1, as amended, is not anticipated or rendered obvious by the *Faghri* patent, nor are the claims depending therefrom, and notice to that effect is respectfully requested.

In response to remarks similar to these, the Office Action mailed July 5, 2005 stated the following:

However contrary to applicants' remarks such heat pipe disposition is clearly shown in Figure 3 of *Faghri*. Remarks drawn to heat transfer characteristics of the housing of *Faghri* were considered, however, the "...heat pipe 22 (of *Faghri* is) disposed at least substantially within the chamber (which includes the phase change 'porous' heat absorbing material) and disposed within the material of the housing (12)." [sic] as recited in the independent claims.

Thus, the Office Action's response to Applicants' amendment to the claims to recite that the heat pipes are "disposed at least substantially within the chamber . . ." is an assertion that such disposition is clearly shown in Figure 3, and the Office Action's response to Applicants' remarks regarding the claimed heat transfer characteristics is that the above disposition of the heat pipes is met by *Faghri*. Applicants respectfully submit that the above position taken in the Office Action is incorrect, as described below.

As clearly shown in Figure 3 of *Faghri*, the heat pipes 22 have a portion within container 12 (referred to as "housing 12" in the Office Action) and a portion external to container 12. The Office Action does not identify what it contends meets the claimed chamber limitation, but the language of Claim 1 is clear that the "housing has a chamber therein." Thus, Applicants respectfully submit, contrary to the statement in the Office Action, that heat pipes 22 are not disposed at least substantially within the chamber [which is disposed within the housing]. With respect to the heat transfer characteristics, the Office Action appears to have relied on the mistaken assumption that the claimed heat pipe disposition was met<sup>1</sup>, but as demonstrated above it was not. Applicants respectfully submit that the rejection of Claim 1 in view of *Faghri* is "clear error" as referred to in the July 12,

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<sup>1</sup> Applicants need not address here whether such reliance would be inappropriate grounds for meeting the heat transfer characteristics limitation because the claimed heat pipe disposition is not disclosed.

2005 Official Gazette Notice regarding New Pre-Appeal Brief Conference Pilot Program and respectfully request its withdrawal.

Independent Claim 14 was also rejected under §102 as anticipated by *Faghri*. In this regard, Claim 14 is a method claim, which includes limitations comparable to the limitations from Claim 1 that have been discussed above. For example, Claim 14 includes a limitation reciting the step of "distributing said heat within the material of said housing, including the step of using a heat pipe disposed at least substantially within the chamber and disposed within the material of said housing to facilitate distribution of said heat in a manner which reduces temperature gradients across said surface." Claim 14 is therefore believed to be patentably distinct from the *Faghri* patent for the same basic reasons as Claim 1, as are the claims depending therefrom, and notice to that effect is respectfully requested.

Independent Claim 27 is allowable for reasons analogous to those described above in conjunction with Claim 1, as are the claims depending therefrom, and notice to that effect is respectfully requested. Claim 27 is also allowable because the Office Action has failed to properly identify in Applicants' specification the claimed means recited by Claim 27 and provide an explanation of why that claimed means is equivalent to any alleged corresponding structure in the cited reference, as required by Section 2183 of the M.P.E.P. Applicants brought this deficiency in the rejection of Claim 27 to the attention of the PTO in Applicants' Response dated September 29, 2004, but the present Office Action does not address this deficiency; rather, it merely repeats the previous rejection. Applicants respectfully submit that this additional deficiency in the rejection of Claim 27 constitutes "clear error," as referred to in the July 12, 2005 Official Gazette Notice regarding New Pre-Appeal Brief Conference Pilot Program, and respectfully request its withdrawal. For at least this additional reason, Claim 27 and the claims depending therefrom are allowable. Reconsideration and favorable action are requested.

**Allowable Subject Matter**

Applicants appreciate the indication in the Office Action that Claims 7-12 and 19-23 are allowed.

**CONCLUSION**

Applicants have now made an earnest attempt to place this case in condition for immediate allowance. For the foregoing reasons and for other apparent reasons, Applicants respectfully request of all pending claims

If the Examiner feels that prosecution of the present Application may be advanced in any way by a telephone conference, the Examiner is invited to contact the undersigned attorney at 214-953-6447.

Applicants do not believe that any fees are due. However, the Commissioner is hereby authorized to charge these fees and any extra fee or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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